

Abstract of the Disclosure

Disclosed is a spindle motor in use for a disk drive and a mobile communication system using the same. The spindle motor comprises a circuit board, a cylindrical housing fixedly mounted on the circuit board and allowing a shaft to be rotatably inserted into the housing, a plurality of grooves formed in an inner periphery of the housing, and a molybdenum disulfide film formed through penetration in the inner periphery of the housing including the grooves. The molybdenum disulfide film and the grooves serve as lubricant to the shaft during rotation of the shaft. An armature is arranged on the circuit board adjacent to an outer periphery of the housing and having lamellar conductors laminated one atop another. A rotor is integrally fixed to the shaft, and has a turntable arranged in a top portion thereof for seating a disk and a magnet arranged in an underside portion thereof for cooperating with the armature to generate electromagnetic force to turn the rotor.